

May 8, 2024

U.S. Department of Energy
Office of Clean Energy Demonstrations
1000 Independence Ave SW
Washington, D.C. 20585

RE: Appalachian H2Hub (ARCH2) Listening Session Before the U.S. Department of Energy (DOE) Office of Clean Energy Demonstrations (OCED): Comments of the Environmental Health Project (EHP)

Good evening. My name is Talor Musil and I represent the [Environmental Health Project](#), a nonprofit that has defended public health in the face of oil and gas development since 2012.

[Blue hydrogen](#) is yet another false, greenwashed solution that adds to the public health harms and climate crisis caused by the fossil fuel industry. Once again, fossil fuel companies, with [long histories of putting Appalachian families in danger's way](#), are trying to spin unproven technology and the use of fracked gas as “clean” and “climate-forward.”

This hub will protect neither public health nor the environment as it will produce hydrogen almost exclusively using methane extracted from geologic formations underlying Appalachia. The process of producing hydrogen fuel from methane and capturing the resultant carbon dioxide is exorbitantly expensive and introduces additional [climate, health, and safety threats](#) to communities already overburdened by heavy industry.

Continuing our dependency on the shale gas extraction industry through blue hydrogen means continued exposure to a variety of toxic pollutants. There are more than [two dozen epidemiological studies](#) that associate proximity to shale gas development with negative health outcomes, including the [Pennsylvania Environment and Health studies](#) released just last year, which found associations with poor birth outcomes, childhood cancer, and asthma exacerbation. Other health impacts identified by the broader body of literature include:

- Heart failure and high blood pressure
- Upper and lower respiratory issues
- Cancer
- Chronic fatigue and migraines
- Stress and anxiety

A public health-conscious review process of ARCH2 must include both an assessment of risk and plans for mitigating risk. The “community benefits” teased by ARCH2 in October’s announcement overlooked the [increase in pollution and health burdens](#) that these facilities and their infrastructure produce. The DOE must take these important factors into account. Accurately assessing the environmental and health impacts of this hub will require detailed, publicly available plans regarding the extraction, storage, transportation, and related waste streams of any fracked gas designated to supply hydrogen production facilities and [carbon capture technology](#).

Before declaring this project as “beneficial” and awarding any further funding, the DOE must measure the following across the entire blue hydrogen lifecycle, from feedstock extraction to waste management:

- Cumulative air, water, and soil pollution impacts
- Health impacts and healthcare costs associated with community and worker exposure to pollution
- The greenhouse gases released into the atmosphere
- Personnel and training costs to ensure effective, adequate responses to explosions, leaks, and other catastrophes

The DOE has the power—and the obligation—to manage this.